

## **Special Conditions**

Permit Number 7711A

### **Emission Limitations**

1. This permit authorizes those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission rates and other conditions specified in the table. In addition, this permit authorizes all emissions from planned startup and shutdown activities associated with facilities or groups of facilities that are authorized by this permit.

### **Fuel Specifications**

2. Fuel for the facilities shall be pipeline-quality natural gas. Use of any other fuel will require prior approval of the Executive Director of the Texas Commission on Environmental Quality (TCEQ).

3. Upon request by the Executive Director of the TCEQ, the TCEQ Regional Director, or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel utilized in these facilities or shall allow air pollution control program representatives to obtain a sample for analysis.

### **Federal Applicability**

4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources in Title 40 Code of Federal Regulations (40 CFR) Part 60, specifically the following:

- A. Subpart A - General Provisions;
- B. Subpart Dc – Small Industrial-Commercial- Institutional Steam Generating Units; and
- C. Subpart UU – Asphalt Processing and Asphalt Roof Manufacture.

5. These facilities shall comply with all applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63, specifically the following:

- A. Subpart A - General Provisions; and
- B. Subpart AAAAAAA - Area Sources: Asphalt Processing and Asphalt Roof Manufacturing.

### **Opacity/Visible Emission Limitations**

6. Opacity of particulate matter emissions from the Coalescing Filter Mist Systems (Emission Point No. [EPN] CFL/34), the Electrostatic Precipitator (EPN CFL/34) (when used as a back-up control device for the filter mist systems), dust collector stacks,

baghouse stacks, process heater vents, and building vents shall not exceed 5 percent, averaged over a six-minute period.

7. Opacity of particulate matter emissions from any asphalt storage tank exhaust gases discharged into the atmosphere shall not exceed 0 percent, averaged over a six-minute period, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing. The control device shall not be bypassed during this 15-minute period. Opacity of particulate matter emissions from any blowing still shall not exceed 0 percent, averaged over a six-minute period.

8. Opacity of emissions from any storage silo and mineral handling facility shall not exceed 1 percent, averaged over a six minute period.

9. No visible fugitive emissions from the asphalt processing and asphalt roofing manufacturing operations and facilities, roads, or travel areas shall leave the property.

### **Operational Limitations, Work Practices, and Plant Design**

10. The emissions from Stillyard Asphalt Storage Tank Nos. T-1, T-2, T-8, T-9, T-10, T-14, T-15, T-110, and T-120; from Blowing Stills T-13 and T-26; from truck and railcar loading and unloading operations; and from the self-seal asphalt storage tank shall be vented to the thermal oxidizer (direct-flame incinerator).

11. Fabric filter baghouses, properly installed and in good working order, shall control particulate matter emissions from the Stabilizer Storages, Stabilizer Heaters, the Line 1 Stabilizer and Heater, the Line 1 Stabilizer Use Bin, and Sand Application when this equipment is in operation.

12. Dust collectors, properly installed and in good working order, shall control particulate matter emissions from the Line 1 Surfacing Section when this equipment is in operation.

13. The thermal oxidizer (direct-flame incinerator) shall be operated at an average incineration temperature of 1450°F measured immediately downstream of the incinerator, based on a one-hour averaging period, during normal operations. Normal operations are herein defined as any time period when asphalt blowing is occurring, and emissions from the blowing are vented to the direct-flame incinerator. The direct-flame incinerator shall be operated at a minimum incineration temperature of 1300°F during Standby Operating Conditions to assure compliance with the maximum allowable emission rates table (MAERT) limits for volatile organic compounds (VOC) from EPN 8/8A. Standby operating conditions are herein defined as when no process blowers are in operation on any blowing still venting to the direct-flame incinerator.

The permit holder is allowed to conduct stack sampling of the thermal oxidizer (direct-flame incinerator) during normal operations at an average temperature lower than 1450°F to demonstrate compliance with the MAERT limits for VOC from EPN 8/8A. Upon demonstration of compliance with the MAERT limits for VOC, the permit holder shall submit a permit action to modify the temperature requirement of the thermal oxidizer (direct-flame incinerator) during Normal Operations.

14. The maximum allowable asphalt throughput rates are 32,063 pounds per hour for Line 1 and 53,438 pounds per hour for Line 3.

15. The maximum allowable production rates for both Line 1 and Line 3, combined, are 171 tons per hour and 1,498,000 tons per year of finished shingles.
16. An opacity violation or an odor nuisance condition, as confirmed by the TCEQ or any local air pollution control program with jurisdiction, may be cause for additional controls. If the nuisance condition persists, subsequent stack sampling may also be required.
17. All in-plant roads and areas subject to road vehicle traffic shall be paved with a cohesive hard surface and cleaned, as necessary, to maintain compliance with the TCEQ rules and regulations. Unpaved work areas shall be sprayed with water and/or environmentally sensitive chemicals upon detection of visible PM emissions to maintain compliance with all TCEQ rules and regulations.
18. All stacks associated with the Line 1 Cooling Section (EPN COOL1) shall be no less than 64 feet measured from ground level. All stacks associated with the Line 3 Cooling Section (EPN COOL3) shall be no less than 73 feet measured from ground level.
19. There shall be no changes in representations unless the permit is altered or amended.
20. The following facilities are authorized by separate Standard Permit:

**Table 1: Standard Permit References**

EPN/ Source Name	Registration No.
NST-1/Baghouse 1 (Filler Transfer Operations)- L3	91414
NST-1/Baghouse 2 (Filler Transfer Operations)- L3	91414

### **Demonstration of Continuous Compliance**

21. Upon request by the TCEQ Executive Director or the TCEQ Regional Director having jurisdiction, the holder of this permit shall perform stack sampling and/or other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere to demonstrate compliance with the MAERT and with emission performance levels as specified in the special conditions and/or otherwise prove satisfactory equipment performance. Sampling must be conducted in accordance with the TCEQ *Sampling Procedures Manual* and in accordance with the applicable EPA 40 CFR procedures. Any deviations from those procedures must be approved by the TCEQ Executive Director or the appropriate TCEQ Regional Director prior to conducting sampling.
22. All stack sampling shall be conducted within 60 days of being informed that testing is required, and it shall meet all requirements specified in the Sampling Requirements section of this permit's special conditions.
23. The holder of this permit shall conduct a quarterly visible emissions determination to demonstrate compliance with the opacity limitations specified in this permit for Coalescing Filter Mist Systems Stack (EPN CFL/34), the Electrostatic Precipitator Stack (EPN CFL/34) (when used as a back-up control device for the filter mist systems), dust collector stacks, baghouse stacks, process heater vents, and building vents. This visible emissions

determination shall be performed: 1) during normal plant operations, 2) for a minimum of six minutes, 3) approximately perpendicular to plume direction, 4) with the sun behind the observer (to the extent practicable), and 5) at least two stack heights, but not more than five stack heights, from the emission point. If visible emissions are observed from the emission point, the owner or operator shall:

- A. Take immediate action to eliminate visible emissions, record the corrective action within 24 hours, and comply with any applicable requirements in 30 Texas Administrative Code (TAC) § 101.201, Emissions Event Reporting and Record Keeping Requirements; or
- B. Determine opacity using 40 CFR Part 60, Appendix A, Test Method 9. If the opacity limit is exceeded, take immediate action (as appropriate) to reduce opacity to within the permitted limit, record the corrective action within 24 hours, and comply with applicable requirements in 30 TAC § 101.201, Emissions Event Reporting and Record Keeping Requirements.

24. The holder of this permit shall conduct a quarterly visible emissions determination to demonstrate compliance with the visible emissions limitation specified in this permit. This visible emissions determination shall be performed: 1) during normal plant operations, 2) for a minimum of six minutes, 3) approximately perpendicular to plume direction, 4) with the sun behind the observer (to the extent practicable), 5) at least 15 feet, but not more than 0.25 mile, from the plume, and 6) in accordance with EPA 40 CFR Part 60, Appendix A, Test Method 22, except where stated otherwise in this condition. If visible emissions exceed 30 cumulative seconds in any six-minute period, the owner or operator shall take immediate action (as appropriate) to eliminate the excessive visible emissions. The corrective action shall be documented within 24 business hours of completion.

25. For any asphalt storage tank, storage silo, or mineral handling facility, visible emissions observations shall be made and recorded once per week. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the corresponding opacity limit, the permit holder shall report a deviation.

26. For any blowing still, visible emissions observations shall be made and recorded once per week. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the

observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.

### **Compliance Assurance Monitoring**

27. The temperature in the combustion chamber or immediately downstream of the combustion chamber of the thermal oxidizer (direct-flame incinerator) shall be measured and recorded four times per hour with an averaging period of one hour. The permit holder shall establish a minimum combustion temperature using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. The monitoring instrumentation shall be maintained, calibrated, and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.

28. The 3-hour average inlet gas temperature for the Coalescing Filter Mist Elimination Systems (Line 1 and Line 3 Asphalt Coaters) with ESP as Backup (EPN CFL/34) shall be maintained within the operating range established as specified in 40 CFR § 63.11562(a)(2) and (b)(3). The 3-hour average pressure drop across the device shall be maintained within the approved operating range established as specified in 40 CFR § 63.11562(a)(2) and (b)(3).

### **Sampling Requirements**

29. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at their own expense. Sampling ports and platforms shall be incorporated into the design of the stack(s) according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" prior to stack sampling. Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Office with jurisdiction.

30. The plant shall operate at the maximum shingle production and raw material throughput rates and operating parameters, represented in the confidential file, during stack emissions testing being conducted for continuing compliance demonstrations. If the plant is unable to operate at the maximum rates during compliance testing, then the production/throughput rates or other parameters may be limited to the rates established

during testing. If stack testing was not accomplished at the maximum production/throughput rates, then such testing may be required prior to actual operations at the maximum rates.

31. A pretest meeting shall be held with personnel from the TCEQ before the required tests are performed. The TCEQ Regional Office with jurisdiction shall be notified not less than 45 days prior to sampling to schedule a pretest meeting. The notice shall include:

- A. Date for pretest meeting;
- B. Date sampling will occur;
- C. Points or sources to be sampled;
- D. Name of firm conducting sampling;
- E. Type of sampling equipment to be used; and
- F. Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test results.

32. Air contaminants to be tested for may include (but are not limited to) PM, CO, SO<sub>2</sub>, NO<sub>x</sub>, and VOC.

33. Alternate sampling methods and representative unit testing may be proposed by the permit holder. A written proposed description of any deviation from sampling procedures or emission sources specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. Such a proposal must be approved by the TCEQ Regional Office with jurisdiction at least two weeks prior to sampling.

34. Requests to waive testing for any pollutant specified in the above special conditions shall be submitted to the TCEQ Office of Air, Air Permits Division in Austin.

35. The sampling report shall include the following:

- A. Plant production and throughput rates during tests; and
- B. Thermal oxidizer (direct-flame incinerator) operating temperature during tests.

36. Copies of the final sampling report shall be forwarded to the TCEQ within 30 days after sampling is completed. Sampling reports shall comply with the attached provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the TCEQ Regional Office with jurisdiction.

One copy to the TCEQ Office of Air, Air Permits Division in Austin.

One copy to each appropriate local air pollution control program with jurisdiction.

**Recordkeeping Requirements**

37. Records shall be maintained at this facility site and made available at the request of personnel from the TCEQ or any other air pollution control program having jurisdiction to demonstrate compliance with permit limitations. These records shall be totaled for each calendar month, retained for a rolling 60-month period, and include the following:

- A. Records of the exhaust gas temperature immediately downstream of the thermal oxidizer (direct-flame incinerator) to demonstrate compliance with 30 TAC § 115.126(1)(A)(i);
- B. Records of either VOC concentration or mass emission rate of each vent gas stream for the Line 1 and Line 3 Cooling Sections at maximum actual operating conditions to demonstrate compliance with 30 TAC § 115.126(4);
- C. Hourly asphalt throughput rates for Line 1 and for Line 3;
- D. Combined Line 1 and Line 3 hourly and annual production rates of finished shingles;
- E. Records of asphalt stored and used, that have the potential to emit Hazardous Air Pollutants (HAPs), kept in sufficient detail in order to allow all required emission rates to be fully and accurately calculated. Using this recorded data, a report shall be produced for the emission of HAPs (in tons per year) over the previous 12 consecutive months;
- F. All malfunctions, repairs, and maintenance of abatement systems, which includes bag replacement and the manufacturer's suggested cleaning and maintenance schedule;
- G. Quarterly observations for visible emissions and/or opacity determinations;
- H. Records of road cleaning, application of road dust control, or road maintenance for dust control; and
- I. All monitoring data and support information as specified in 30 TAC § 122.144.

Dated: November 25, 2014